

## Transmission Range (TR) Sensor

Base Part Number: Base Part Number: 7F293

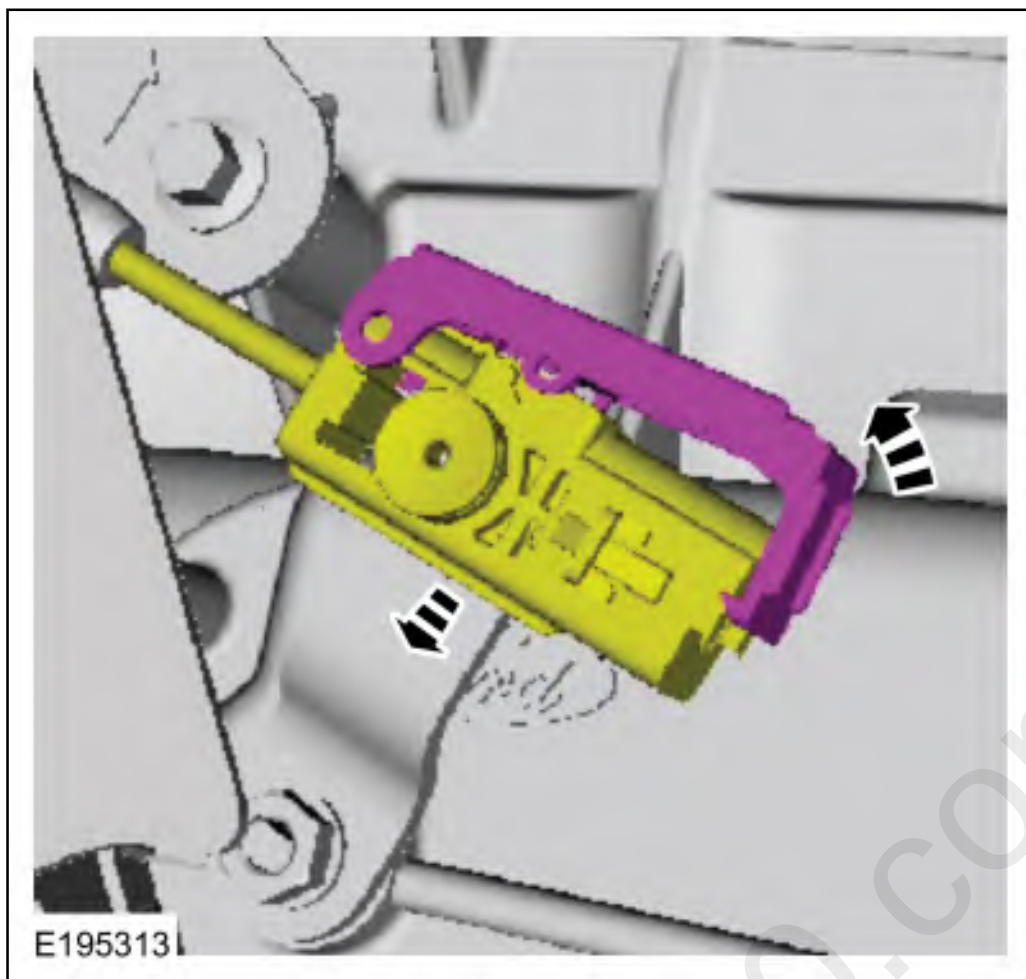
### Special Tool(s) / General Equipment

|       |
|-------|
| Punch |
|-------|

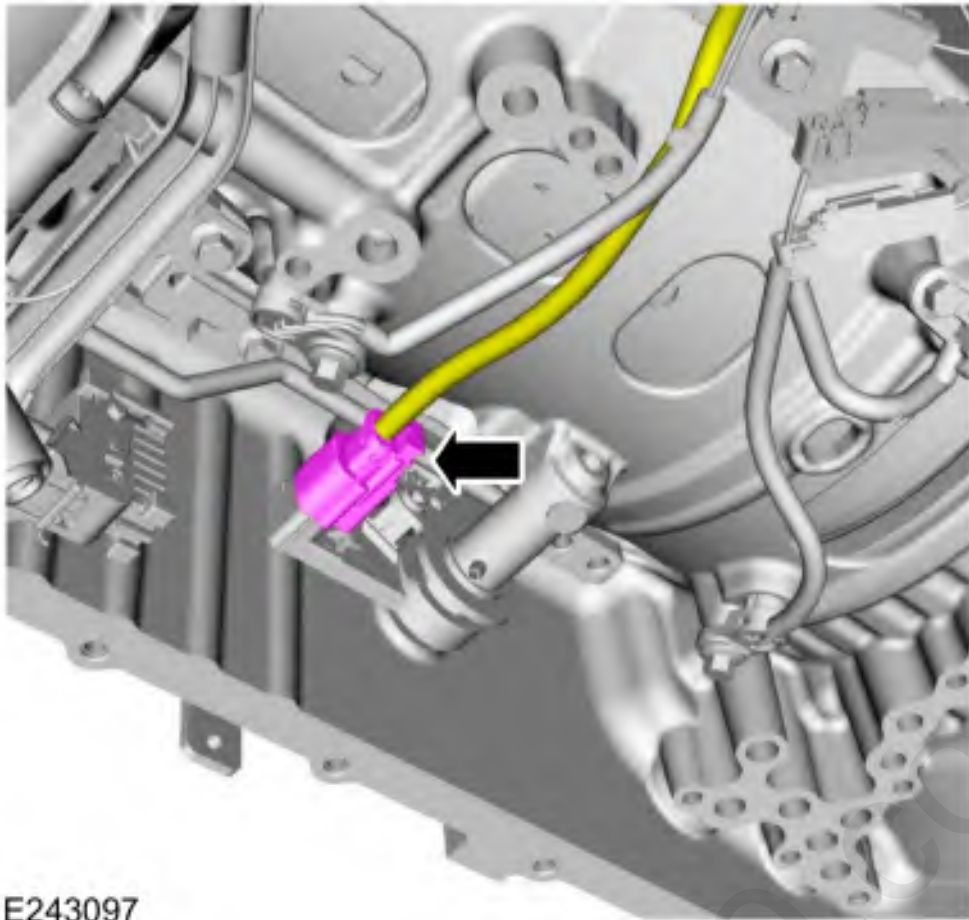
### Removal

1. Remove the main control valve body.  
Refer to: [Main Control Valve Body](#) (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Overhaul).
2. **NOTICE: To prevent selector lever cable damage, do not apply force to the selector lever cable between the manual control lever and the selector lever cable bracket.**

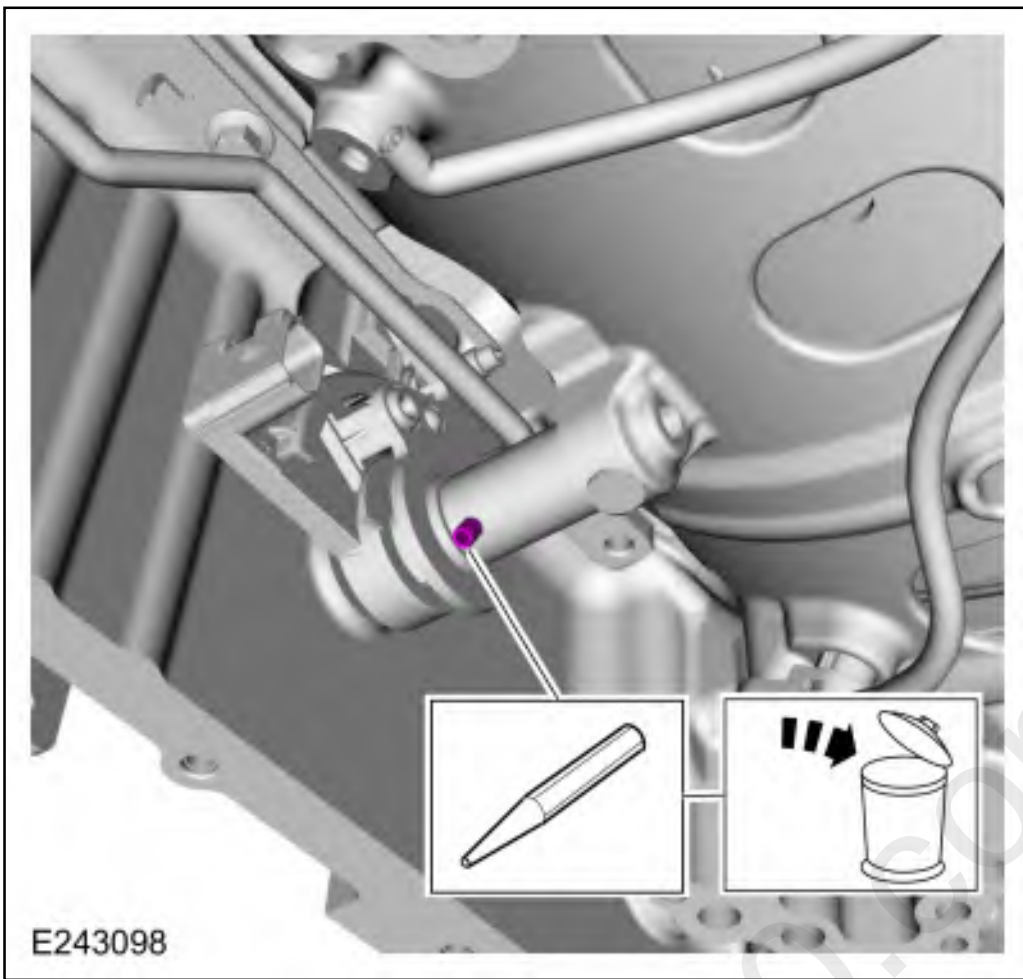
Rotate the cable adjuster lock upward and disconnect the selector lever cable from the manual control lever.



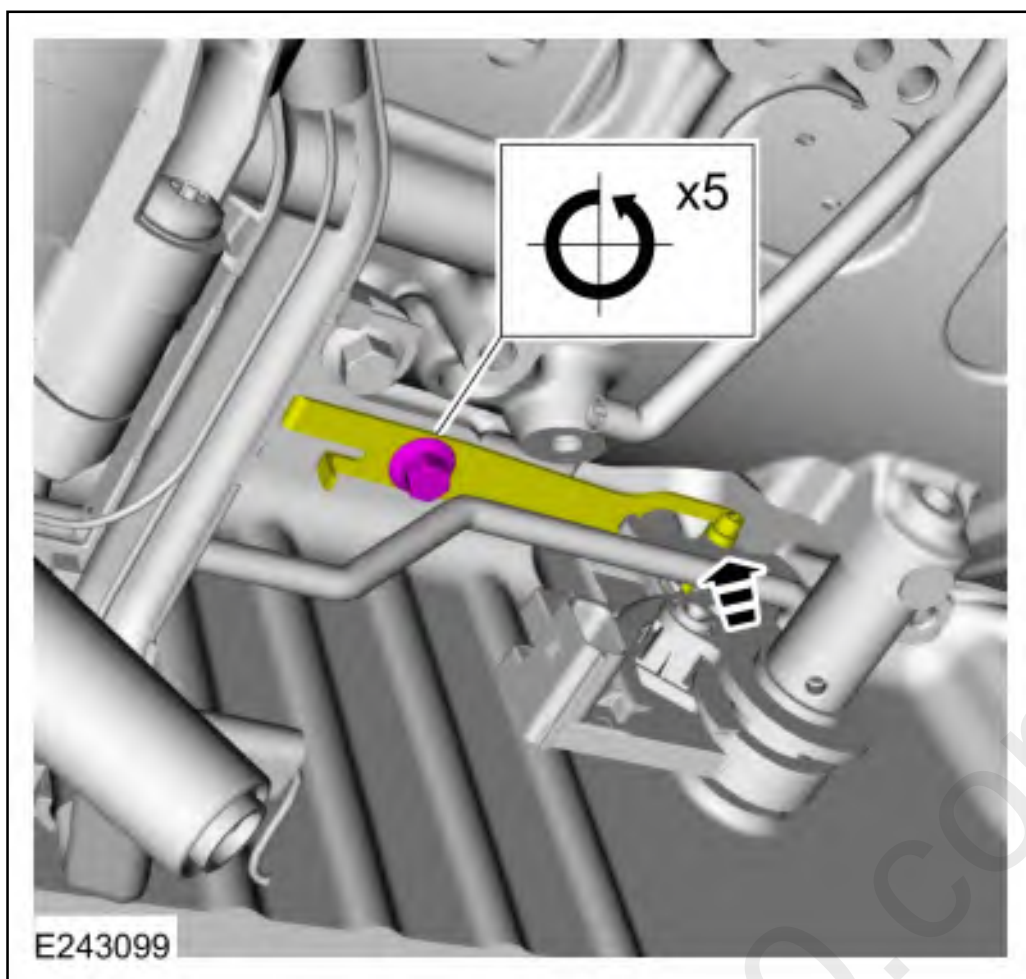
3. Disconnect the TR sensor electrical connector and position the transmission wiring harness aside.



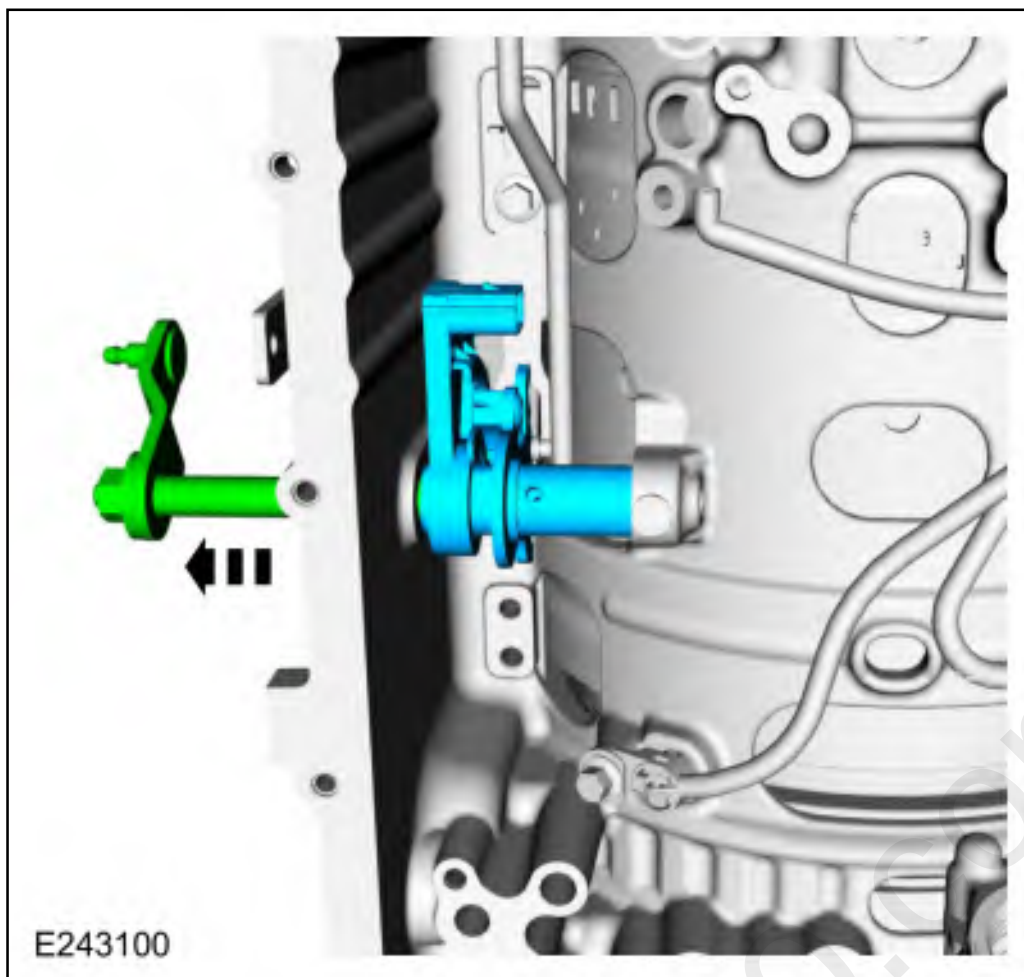
4. Using a punch, remove and discard the manual shaft-to-TR sensor roll pin (7G100).  
Use the General Equipment: Punch



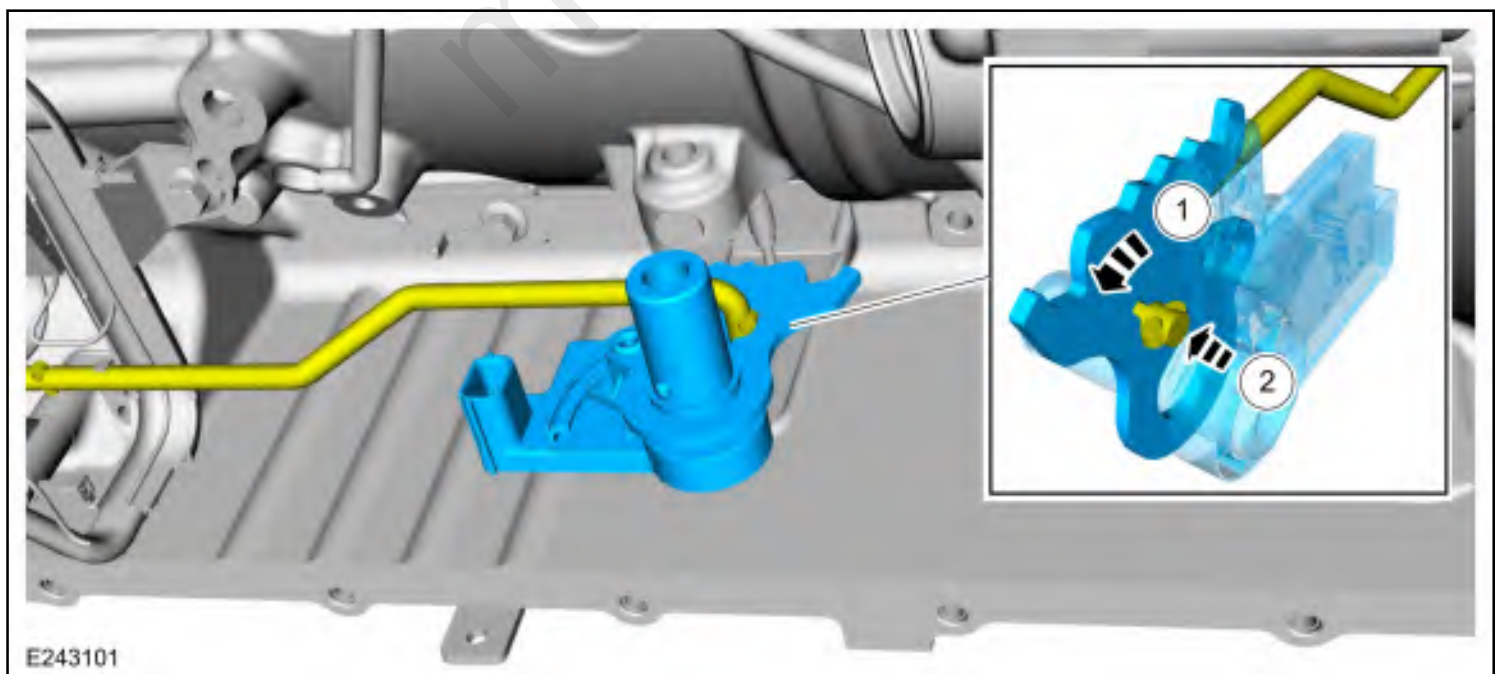
5. Loosen the detent spring bolt and the detent spring enough to remove the tension from the TR sensor.



6. Remove the manual shaft and selector lever from the TR sensor.

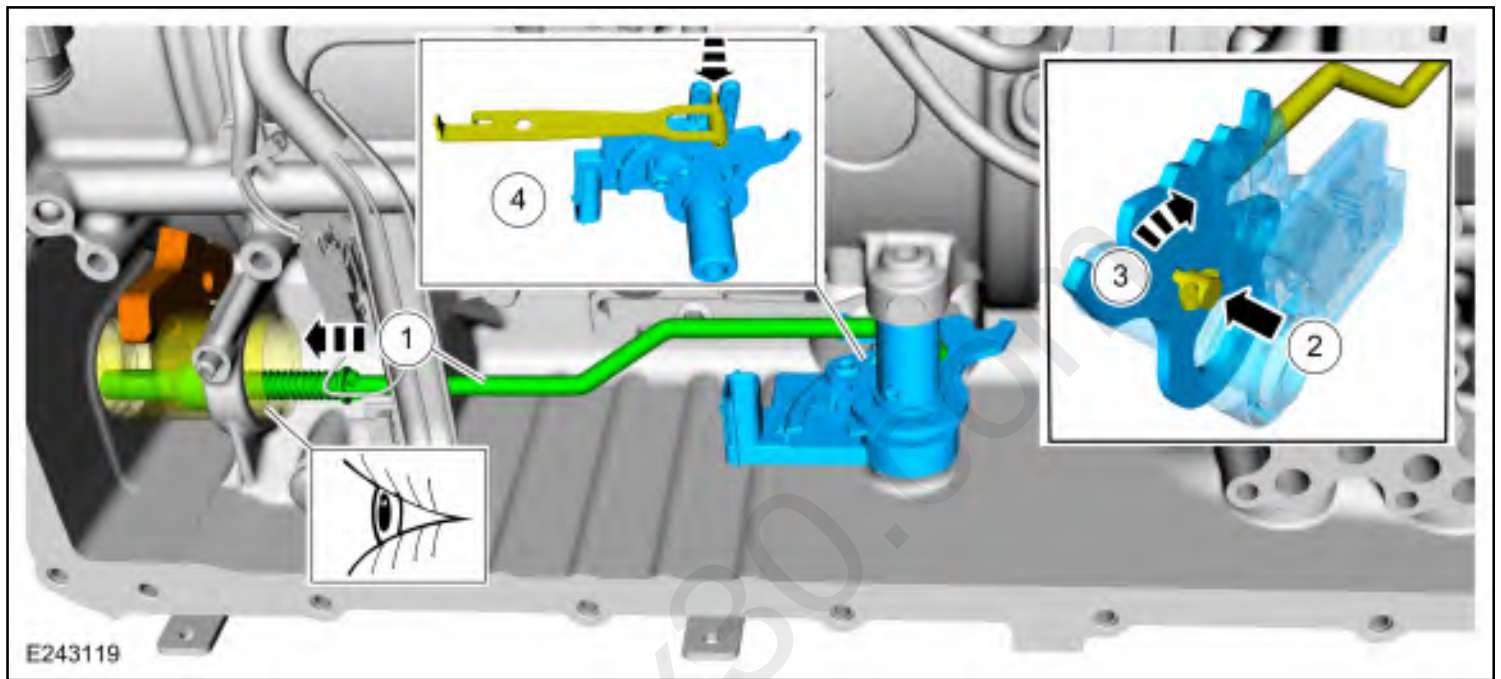


7. Remove the TR sensor (7H557).
1. Rotate the TR sensor.
  2. Disconnect the park pawl actuator rod and remove the TR sensor.

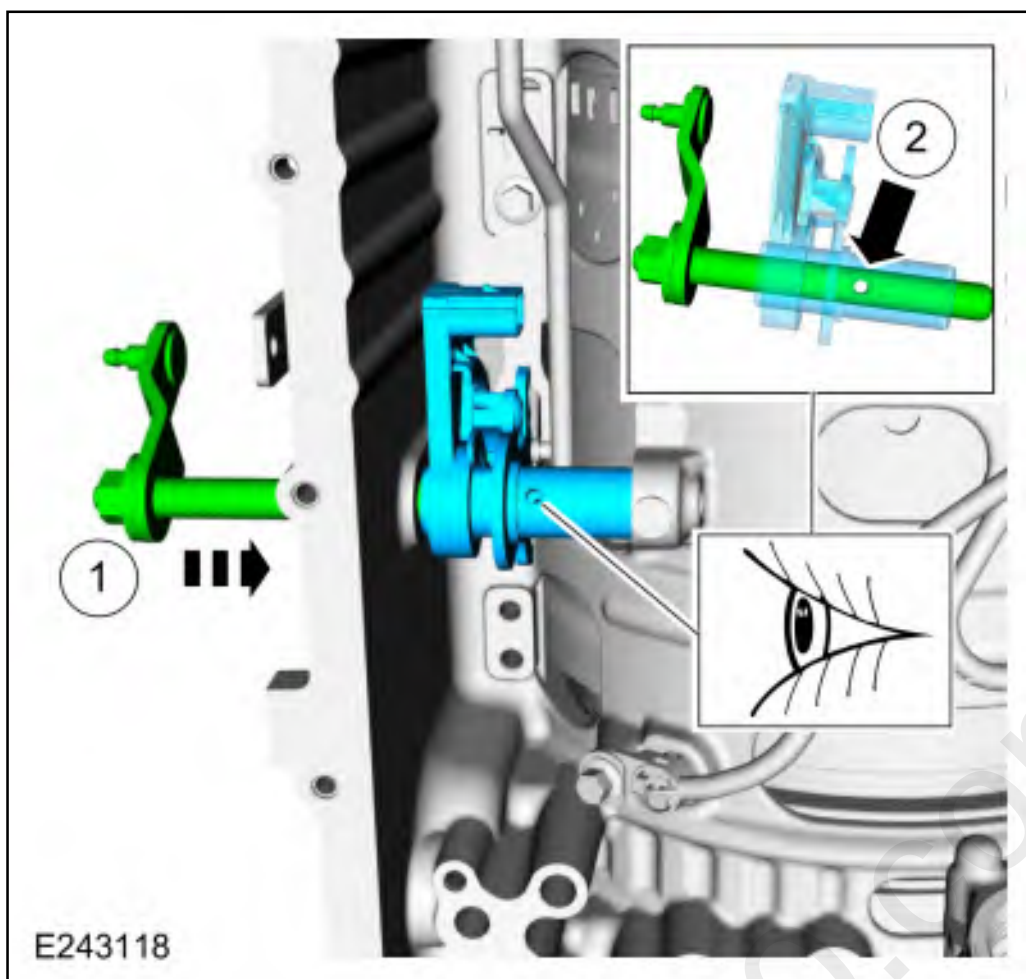


## Installation

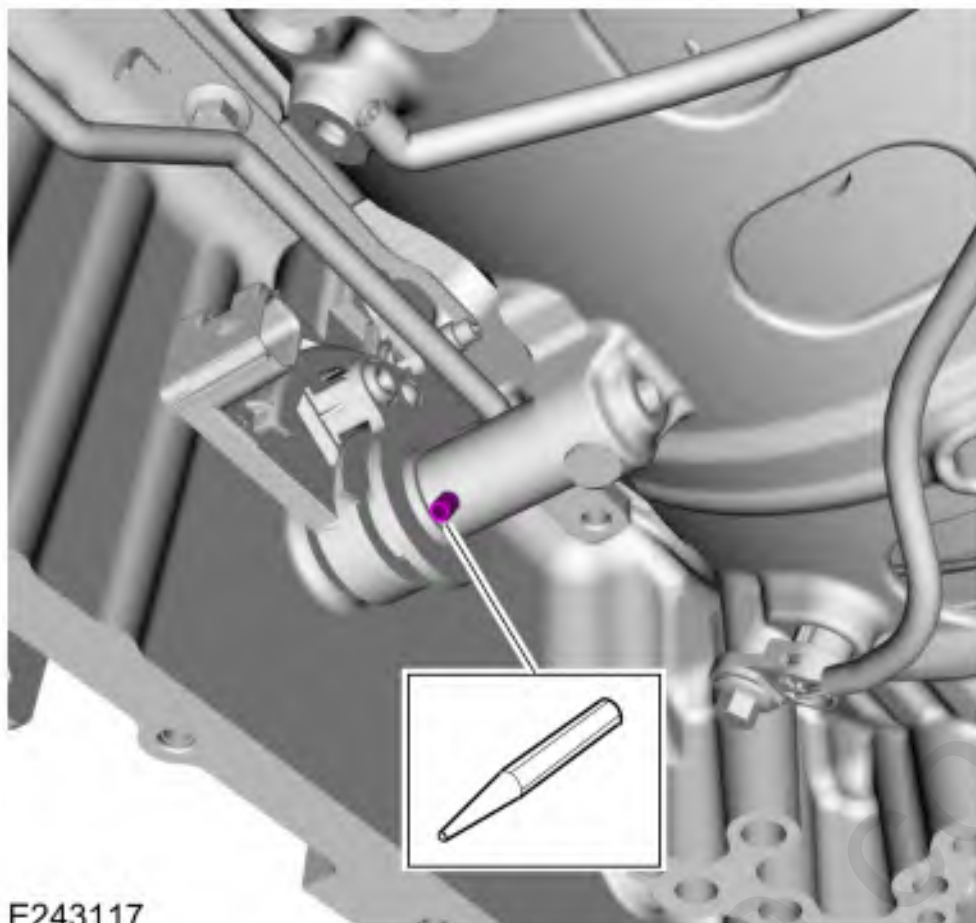
1.  
Install the TR sensor (7H557).
  1. Position the park pawl actuator rod into the park pawl sleeve.
  2. Connect the park pawl actuator rod to the TR sensor.
  3. Rotate the TR sensor.
  4. Align the TR sensor to the detent spring.



1. Slide the manual shaft and selector lever into the TR sensor.
2. Align the TR sensor roll pin hole.



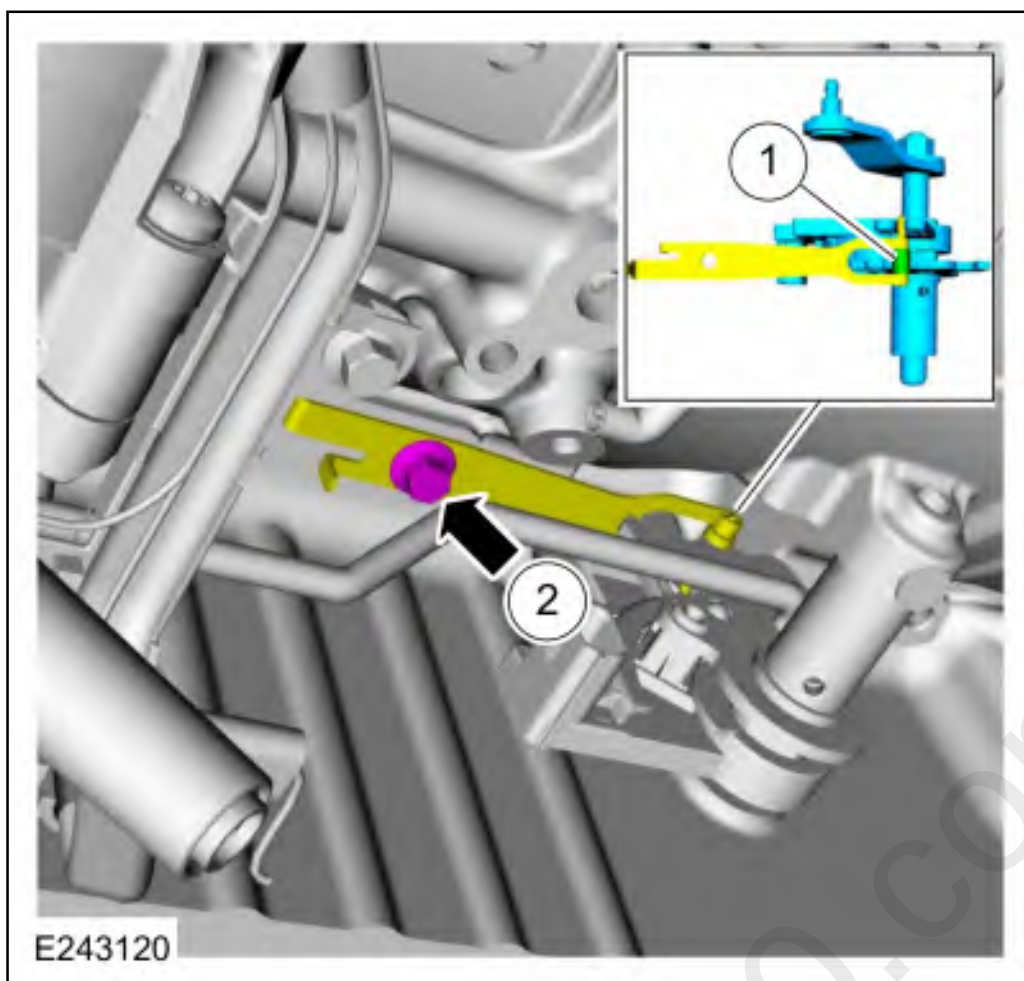
3. Using a punch, install the new manual shaft-to-TR sensor roll pin (7G100).  
Use the General Equipment: Punch



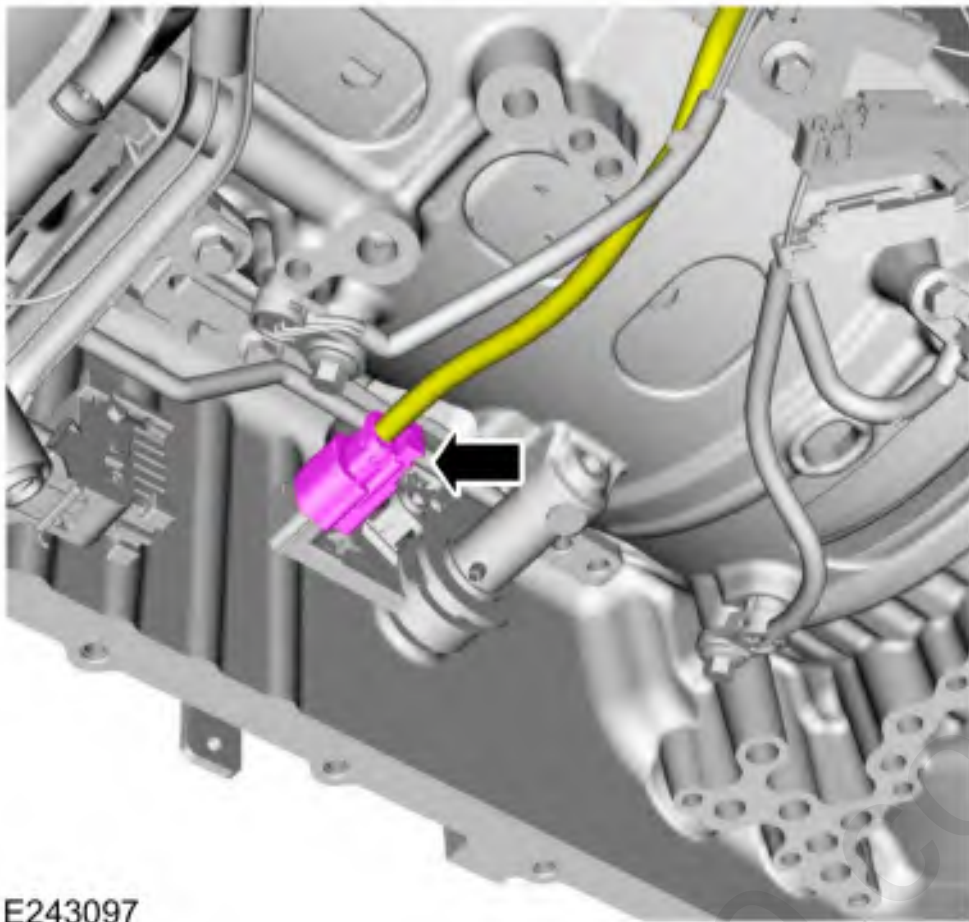
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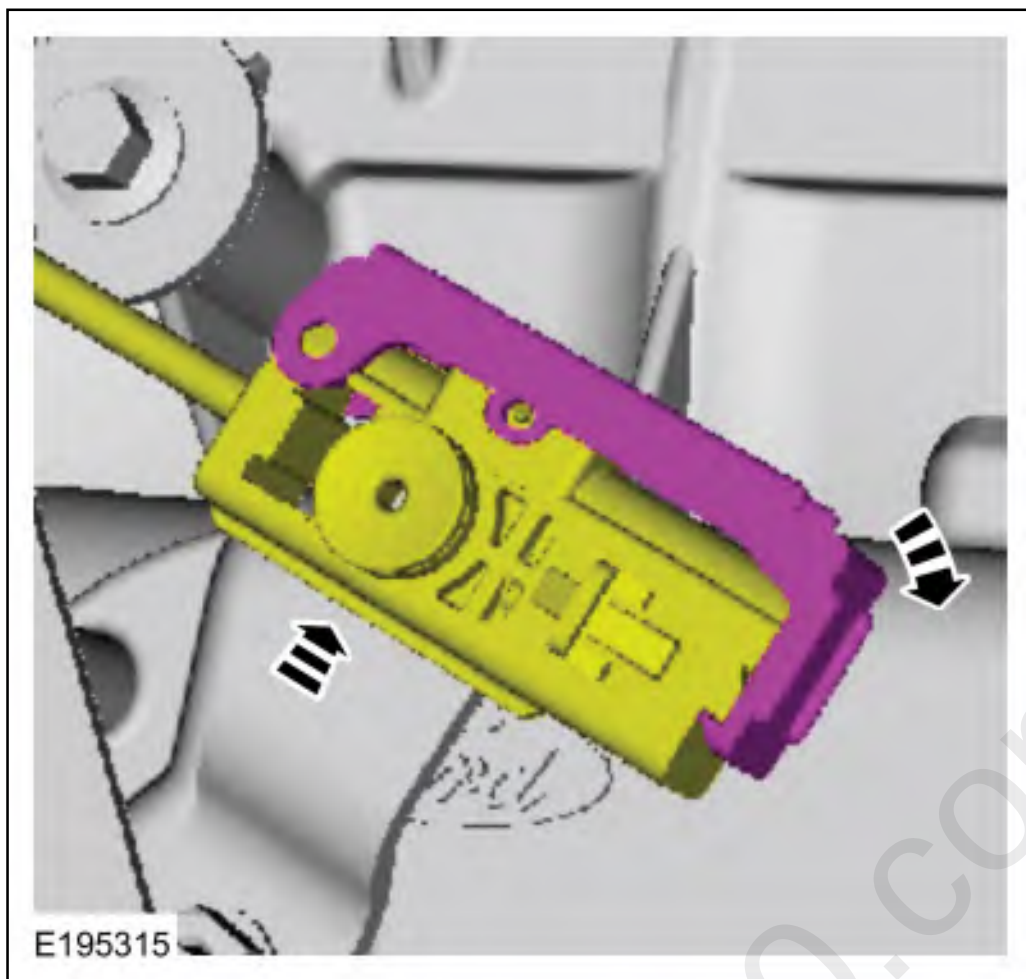
1. Align the detent spring in the center of the TR sensor.
2. *Torque*: 97 lb.in (11 Nm)



5. Connect the TR sensor electrical connector.



6. Connect the selector lever cable onto the manual control lever and move the cable adjuster lock down.
  - Listen for the audible click, then push back on the cable adjuster lock to verify it is locked.
  - Pull back on the selector lever cable to verify it is installed correctly to the manual lever.



7. Install the main control valve body.

Refer to: [Main Control Valve Body](#) (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Overhaul).